The QBC STAR Dry Hematology System requires no liquid reagents and provides a 9-parameter CBC in only 7 minutes from draw to results. Samples can be collected via finger stick or venous draw to analyze the following parameters: hematocrit, hemoglobin, MCHC (Mean Corpuscular Hemoglobin Concentration), white blood cell count, granulocyte count and percentage, lymphocyte/monocyte count and percentage, and platelet count. The QBC STAR™ is trusted in many remote locations around the world: cruise ships, military bases and vessels, community and rural clinics, urgent care facilities, and pediatric offices.
How It Works

The STAR contains an integrated centrifuge and optical reader. The optical reader reads the location of the layers after centrifugation. A processor calculates the CBC values from the optical readings and returns results in digital and printed form.

Centrifugation: The QBC STAR’s internal centrifuge rotates the sample at 11,000 RPM for approximately 5 minutes. Due to their different densities, the different components of blood separate into layers during this process, as seen in the illustration to the right.

The Tubes: The QBC STAR’s breakthrough technology begins with its unique blood collection tubes. These high-grade tubes are internally coated with all necessary stains and reagents and are easily filled with just 70µL of blood from finger sticks, heel sticks, or venous draws.

The tubes contain a precision float which stretches out the platelet, lymphocyte and monocyte, and granulocyte layers to make these small layers more easily measurable. The precise specific density of the float also allows for the direct measurement of the hemoglobin concentration in the red blood cells.

QBC STAR P/N: 429001  |  OBC STAR Tube P/N: 429011 (20 Count), 429625 (100 Count)

QBC STAR Operating Ranges

<table>
<thead>
<tr>
<th>PARAMETERS</th>
<th>OPERATING RANGE</th>
<th>PRECISION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hematocrit (Hct) (%)</td>
<td>15 – 65</td>
<td>2% C.V.</td>
</tr>
<tr>
<td>Hemoglobin (Hgb) (g/dL)</td>
<td>5.0 – 20.0</td>
<td>1.9% C.V.</td>
</tr>
<tr>
<td>Mean Corpuscular Hemoglobin Concentration (MCHC) (g/dL)</td>
<td>25 - 37.3</td>
<td>N/A</td>
</tr>
<tr>
<td>WBC Count (x 10^9/L)</td>
<td>1.6 – 99.9</td>
<td>6.4% C.V.</td>
</tr>
<tr>
<td>Granulocyte (x 10^9/L)</td>
<td>0.8 – 70</td>
<td>&lt; 3.2 S.D.</td>
</tr>
<tr>
<td>Granulocyte % (Gran %)</td>
<td>1 - 99</td>
<td>N/A</td>
</tr>
<tr>
<td>Lymphocyte/Monocyte Count (x 10^9/L)</td>
<td>0.8 – 99.9</td>
<td>&lt; 3.2 S.D.</td>
</tr>
<tr>
<td>Lymphocyte and Monocyte % (Lymph/Mono %)</td>
<td>1 - 99</td>
<td>N/A</td>
</tr>
<tr>
<td>Platelet Count (x 10^9/L)</td>
<td>20 – 999</td>
<td>6.0% C.V.</td>
</tr>
</tbody>
</table>

General Specifications

- **Dimensions:** W16" x D16.3" x H16.3"
  40.6 cm x 41.4 cm x 41.4 cm
- **Weight:** 19 lbs. (8.6 kg)
- **Noise:** < 70 db @ 3 ft
- **Sample Volume:** 70 µL
- **Display:** LCD, Resolution 160x160
- **Printout:** 58 mm thermal recorder paper

Electrical Specifications

- **Voltage Input:** 90 - 264 VAC
- **Frequency:** 50 - 60 Hz
- **Current Output:** 5.21 A (Peak)

Connectivity

- **USB:** 3 external Ports
- **Ethernet (Wired):** RJ45
- **LIS Integration:** Possible

Operating Environment

- **Temperature:** 16°C - 32°C
- **Humidity:** 10% - 95% Non-condensing

WARRANTY

Drucker Diagnostics warrants that this device is free from defects in workmanship and parts for 1 year.

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